CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY DEPARTMENT OF PESTICIDE REGULATION MEDICAL TOXICOLOGY BRANCH SUMMARY OF TOXICOLOGY DATA

ISOPARAFFINIC HYDROCARBONS

Chemical Code # 001641, Tolerance # 50667, SB 950 # 713

Original date: November 2, 1987 Revised date: 12/9/87; 7/19/01

I. DATA GAP STATUS

Chronic, rat: Data gap, no study on file

Chronic, dog: Data gap, no study on file

Oncogenicity, rat: Data gap, no study on file

Oncogenicity, mouse: Data gap, inadequate study, possible adverse effect indicated

Reproduction, rat: Data gap, no study on file

Teratology, rat: Data gap, no study on file

Teratology, rabbit: Data gap, no study on file

Gene mutation: Data gap, inadequate study, no adverse effect indicated

Chromosomal aberration: Data gap, inadequate study, no adverse effect indicated

DNA damage: Data gap, no study on file

Neurotoxicity: Not required at this time

Note, Toxicology one-liners are attached

** indicates acceptable study.

Bold face indicates possible adverse effect.

Toxicology Summary Original: J. Gee, 11/2/87; Revised: C. Aldous, 12,9/87; J. Kishiyama, & M.

Silva, 7/19/01

File name: T010719

II. TOXICOLOGY ONE-LINERS AND CONCLUSIONS

These pages contain summaries only. Individual worksheets may contain additional effects.

COMBINED, RAT

no study on file

CHRONIC TOXICITY, RAT

no study on file

CHRONIC TOXICITY, DOG

no study on file

ONCOGENICITY, RAT

no study on file

ONCOGENICITY, MOUSE

no study on file

REPRODUCTION, RAT

no study on file

TERATOLOGY, RAT

no study on file

TERATOLOGY, RABBIT

no study on file

GENE MUTATION

50667 - 001 037857 "In vitro Microbiological Mutagenicity Studies of Phillips Petroleum Company Hydrocarbons Propellants and Aerosols." (Stanford Research Institute, 5/13/77) Tested propellants A-17, A-31, A-108 and F plus aerosols D and E (See letter dated October 11, 1985 for components of A-31 and A-108 in 50667-001); tested with Salmonella strains TA1535, TA1537, TA1538, TA98 and TA100 with and without rat liver activation for 8 and 48 hours at 1 to 50% of the atmosphere above the plates in a dessicator; tested twice on separate days; methylene chloride as the positive control was not effective in TA1537 or TA1538; no increase in reversion rate reported; cytotoxicity by decrease of spontaneous reversion rate with aerosol D, aerosol E and propellant F at higher concentrations; UNACCEPTABLE (no description of propellants A17 and F and aerosols D and E; no individual plate counts or number of plates per trial; positive control was not effective in two strains). JG, 10/28/87.

50667 - 001 037858 "Salmonella typhimurium Mammalian Microsome Plate Incorporation Assay - Soltrol 130 - Final Report." (Hazleton, 8/13/82). Isoparaffinic hydrocarbons (Soltrol 130), C10-C13 isoparaffins, "assumed 100%"; tested with strains TA 1535, TA1537, TA98 and TA 100 with and without rat liver activation, single trial with triplicate plates; 0, 41.2, 123.5, 370.4, 1111.1, 3333.3 or 10000 ug/plate; no increase in reversion rate reported. UNACCEPTABLE - single trial with no demonstration of cytotoxicity at highest concentration and no analysis of test article to demonstrate exposure of Salmonella. JG, 10/28/87.

50667 - 001 037859 "Mouse Lymphoma Forward Mutation Assay - Soltrol 130 - Final Report." (Hazleton, 8/2/82) Isoparaffinic hydrocarbons (Soltrol 130), C10-C13 isoparaffins, "assumed 100%"; tested with rat liver activation at 0, 83, 118, 168, 240 343, 490, 700 or 1000 ug/ml (1000 stated to limit of solubility) and without activation at 0, 8.3, 11.8, 16.8, 24.0, 34.3, 49, 70, or 100 mg/ml; generalized protocol indicates a 4 hour incubation with test material; no increase in mutation frequency reported; UNACCEPTABLE (single trial, inadequate report - single page plus one table of summary data which contains only "total survival" in percent and "mutation frequency"; no individual plate counts, not total colony counts, no data for growth by days; only generalized protocol not specified for this study - the full report with raw data should be submitted.) JG, 10/28/87.

CHROMOSOME EFFECTS

50667 - 001 037860 "In vitro sister Chromatid Exchange in Chinese Hamster Ovary Cells - Soltrol 130 - Final Report." (Hazleton, 1/13/83) Isoparaffinic hydrocarbons, Soltrol 130, "assumed 100%"; tested in Chinese hamster ovary cells with and without rat liver activation at 0, 0.5, 1.7, 5.0, 17 or 50 mg/ml based on growth inhibition (no data): two hour exposure; scored 50 metaphases per concentration for sister chromatid exchanges; no increase in incidence reported; UNACCEPTABLE (only generalized protocol with a single page specific for this study and one table of summary data - need full report with cytotoxicity data to justify concentrations used. Explanation for including cyclohexane in the table when the solvent was stated to be DMSO.) JG, 10/28/87.

DNA DAMAGE

no study on file

NEUROTOXICITY

no study on file